

Title (en)
Spatial diffusion in images

Title (de)
Räumliche Diffusion bei Bildern

Title (fr)
Diffusion spatiale dans des images

Publication
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Application
EP 07301345 A 20070906

Priority
EP 07301345 A 20070906

Abstract (en)
The invention is related to spatial diffusion in images. Spatial diffusion helps blurring small discontinuities. Edges become sharper by spatial diffusion as well. A method for generating a spatial diffused image from an input image is described wherein the method comprises applying on the input image an inverted Gaussian spatial bilateral filter with a spatial weight which takes the form of an inverted Gaussian. The inverted-Gaussian-spatial bilateral filter, which uses an inverted-Gaussian function as the kernel of spatial filter, can remove small spots in large smooth areas efficiently.

IPC 8 full level
G06T 5/20 (2006.01)

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Citation (search report)

- [A] TOMASI C ET AL: "Bilateral filtering for gray and color images", SIXTH INTERNATIONAL CONFERENCE ON COMPUTER VISION (IEEE CAT. NO.98CH36271) NAROSA PUBLISHING HOUSE NEW DELHI, INDIA, 1998, pages 839 - 846, XP002471367, ISBN: 81-7319-221-9
- [A] DURAND F ET AL: "Fast Bilateral Filtering for the Display of High-Dynamic-Range Images", ACM TRANSACTIONS ON GRAPHICS, ACM, NEW YORK, NY, US, vol. 21, no. 3, July 2002 (2002-07-01), pages 257 - 266, XP002312495, ISSN: 0730-0301
- [A] SYLVAIN PARIS ET AL: "A Fast Approximation of the Bilateral Filter Using a Signal Processing Approach", COMPUTER VISION - ECCV 2006 LECTURE NOTES IN COMPUTER SCIENCE;;LNCS, SPRINGER-VERLAG, BE, vol. 3954, 2006, pages 568 - 580, XP019036567, ISBN: 3-540-33838-1

Cited by
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